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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/592,148	06/12/2000	Tae Joon Park	0465-1990PUS1	5121

2292 7590 12/14/2009

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EXAMINER	
SHERR, CRISTINA O	

ART UNIT	PAPER NUMBER
3685	

NOTIFICATION DATE	DELIVERY MODE
12/14/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	09/592,148	PARK, TAE JOON	
	Examiner	Art Unit	
	CRISTINA SHERR	3685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 November 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *132-155* is/are pending in the application.

4a) Of the above claim(s) *132-140* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *141-155* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *April 18, 2009, August 6, 2009, and October 16, 2009*
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to Applicant's Amendment filed November 2, 2009. Claims 132-155 are currently pending in this case. Claims 132, 133, 141, 150, 151, and 153 are currently amended. Claims 132-140 are withdrawn, pursuant to a Requirement for Restriction issued October 2, 2209. Accordingly, claims 141-155 are currently under examination.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 5, 2009 has been entered.

Election/Restrictions

3. Applicant's election of claim 141-155 in the reply filed on October 2, 2009 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Information Disclosure Statement

4. The information disclosure statements (IDS) submitted on April 18, 2009, August 6, 2009, and October 16, 2009 are in compliance with the provisions of 37 CFR 1.97.

Accordingly, the information disclosure statements are being considered by the examiner.

Response to Arguments

5. Applicant's arguments with respect to claims 141-155 have been considered but are moot in view of the new ground(s) of rejection.

Remarks

6. Note that the manner or method in which machine is to be utilized is not germane to issue of patentability of machine itself. *In re Casey*, 152 USPQ 235 (CCPA 1967)

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 150-155 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

9. Under the broadest reasonable interpretation standard, independent claim 150 recites a computer program only. "Computer programs claimed as computer listings per se, *i.e.*, the descriptions or expressions of the programs, are not physical 'things.' They are neither computer components nor statutory processes, as they are not 'acts' being performed." MPEP §2106.01 I. Because the claim recites only abstractions that are neither "things" nor "acts," the claim is not within one of the four statutory classes of invention.[1] Because the claim is not within one of the four statutory classes of

[1] 35 U.S.C. §101 defines four categories of inventions that Congress deemed to be the appropriate subject matter of a patent; namely, processes, machines, manufactures and

invention, independent claim 1 and its dependent claims 2-20 are rejected under 35 U.S.C. §101.

10. In this particular case, independent claim 150 recites, inter alia, "a data storage medium" and a "data used for controlling a parameter of a descrambling operation", which, under the broadest reasonable interpretation are interpreted as software or computer programs. For this reason, independent claim 1 and its dependent claims 2-20 are rejected under 35 U.S.C. §1

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. Claims 141-146, and 150-154 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roth et al (US 5,243,650) in view of Bourel (US 5,530,756).

13. Regarding claims 141 and 150 -

14. Roth discloses an apparatus for processing digital data, comprising:

a receiving part to receive a control data and one or more scrambled data units, the control data being used for controlling a parameter of a scrambling/descrambling

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compositions of matter. The latter three categories define "things" (or products) while the first category defines "actions" (*i.e.*, inventions that consist of a series of steps or acts to be performed).

operation and the same control data being used for one or more succeeding data units; (e.g. fig. 2; col 1:57-60; col 2:36-47, 55-57; col 3:2-4, 30-38; col 3:66-4:6; col 4:15-20) a descrambler to descramble the received one or more scrambled data units and one or more succeeding data units based on the same control data. (e.g. fig 4; col 3:30-38; col 4:15-29).

15. Roth does not discloses wherein the same descrambler is used to descramble both the scrambled digital video data and the scrambled digital audio data; and a controller, operatively coupled to the descrambler, to control the descrambling operation by the descrambler. Bourel, however, does, at col 5 ln 46-63.

16. Roth does not disclose wherein each of the one or more scrambled data units and the one or more succeeding data units including scrambled digital video data or scrambled digital audio data. Bourel, however, does at col 4 ln 14-25.

17. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Roth to include detecting the control data based on a signal associated with the position of the control data within the first sub data unit as disclosed in Bourel in order to allow for the use of a single control word for both an audio and video signal when the signal are not synchronized.

18. Regarding claims 142 and 151 –

19. Roth discloses wherein the control data is used to initialize a descrambler for performing the descrambling operation, and wherein the descrambling step includes initializing the descrambler based on the control data. (col 3:66-4:29).

20. Regarding claims 143 and 152 –

21. Bourel discloses, as Roth does not, a method, wherein the digital data comprises a plurality of data blocks including a first data block, each data block including one data unit and a header, at least the header in the first data block including the control data, and wherein the descrambling step descrambles the data unit except for the header. (e.g. col 5 ln 46- col 6 ln 5).

22. Regarding claims 144 and 153-

23. Roth discloses a method wherein the control data is changed or refreshed periodically, and wherein the descrambling step descramble s one or more succeeding data units based on the changed or refreshed control data. (col 3 ln 66- col 4 ln 29).

24. Regarding claims 145 and 154 -

25. Bourel discloses wherein at least two scrambled data units and a header including the control data comprise one data group, the header including the control data, and wherein the method further comprises: demultiplexing the at least two scrambled data units and the header from one data group before the descrambling step. (e.g. col 5 ln 46- col 6 ln 5).

26. Regarding claim 146 –

27. Bourel discloses wherein the data group includes at least two packets, at least first packet including the header, and wherein the demultiplexing step demultiplexes the at least two packets from one data group. (e.g. col 5 ln 63- col 6 ln 5).

28. Claims 147--149, and 155 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roth et al (US 5,243,650) in view of Bourel (US 5,530,756), further in view of Kanota et al (US 5,418,853).

29. Roth and Bourel disclose a discussed above.

30. Regarding claims 147, 148, and 155 –

31. Roth and Bourel do not disclose copy prevention information, the copy prevention information including one of current generation information and allowable generation information, the current generation information indicating a number of times the digital data has been copied and the allowable generation information indicating a number of permitted copies of the digital data, and wherein the method further comprises: performing a copy prevention function such that copying of digital data is not permitted if the copy prevention information indicates that copying of digital data is not permitted. Kanota, however, does, at fig 2; col 4 ln 61-col 5 ln 14.

32. It would have been obvious to one of ordinary skill in the art to combine Bourel, Roth and Kanota in order to include detecting the control data based on a signal associated with the position of the control data within the first sub data unit as disclosed in Bourel in order to allow for the use of a single control word for both an audio and video signal when the signal are not synchronized and further to combine with Kanota since the encryption of software or digital data in Roth is equivalent to copy control as in Kanota.

33. Regarding claim 149 –

34. Roth and Bourel do not disclose wherein the descrambling step is performed only if the copy prevention information indicates that copying of digital data is permitted. Kanota, however, does, at, e.g., col 5 ln 1-15.

Conclusion

35. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

36. Walker et al (US 5,054,064) disclose a video control system for recorded programs.

37. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CRISTINA SHERR whose telephone number is (571)272-6711. The examiner can normally be reached on 8:30-5:00 Monday through Friday.

38. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Calvin L. Hewitt, II can be reached on (571)272-6709. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

39. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CRISTINA OWEN SHERR

Examiner
Art Unit 3685

/Calvin L Hewitt II/
Supervisory Patent Examiner, Art Unit 3685